



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-6418; Directorate Identifier 2015-NM-158-AD; Amendment 39-18676; AD 2016-20-10]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500, and -600 series airplanes. This AD was prompted by reports of fuel leaking through fuel pump electrical connectors and of fuel pump electrical connector damage caused by the build-up of moisture behind the electrical connectors. This AD requires an inspection of the fuel pumps to identify their part numbers and replacement of affected pumps. We are issuing this AD to prevent a potential ignition source and a fuel leak through damaged fuel pump electrical connectors, which creates a flammability risk in an area adjacent to the fuel tank.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Airbus SAS, Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6418.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6418; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace

Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601

Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1138; fax:

425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500, and -600 series airplanes. The NPRM published in the Federal Register on May 9, 2016 (81 FR 28033) (“the NPRM”). The NPRM was prompted by reports of fuel leaking through fuel pump electrical connectors and of fuel pump electrical connector damage caused by the build-up of moisture behind the electrical connectors. The NPRM proposed to require an inspection of the fuel pumps to identify their part numbers and replacement of affected pumps. We are issuing this AD to prevent a potential ignition source and a fuel leak through damaged fuel pump electrical connectors. This condition creates a flammability risk in an area adjacent to the fuel tank.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2015-0194, dated September 22, 2015, to correct an unsafe condition for all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500, and -600 series airplanes. The MCAI states:

Operators reported cases of fuel leak through fuel pump electrical connectors. Subsequent investigation revealed fuel pump electrical connector damage caused by moisture build up behind the electrical connector.

This condition, if not detected and corrected, could create concurrently an ignition source and fuel leak as a result of a single failure, resulting in exposure to a flammability risk in an adjacent area to the fuel tank.

To address this unsafe condition, Airbus published Service Bulletins (SB) A330-28-3127, SB A340-28-4138 and SB A340-28-5060, providing inspection / identification instructions, and instructions for replacement of the fuel pumps.

For the reasons described above, this [EASA] AD requires identification and replacement of the affected fuel pumps.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6418.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response to the comment.

### **Request to Clarify Compliance for Affected Pumps**

American Airlines (AAL) requested that we clarify which groups of pumps paragraphs (h)(1) and (h)(2) of the proposed AD are intended to control. Where individual items begin with "All of the affected pumps . . ." AAL explained that paragraph (h) of the proposed AD must be intended to refer to all of the affected pumps on each airplane. AAL pointed out that this language creates a requirement for all airplanes that have one or more pumps having part number (P/N) 568-1-28300-001 or

568-1-28300-002 installed to be modified in accordance with the service information within 72 months. AAL asserted that consistent references to “each affected pump” confuse that interpretation and seem to imply that each pump is treated separately. If the intent is to control the compliance time for replacement at the pump level, AAL stated that it would be more efficient to simply state that -001 and -002 pumps must be replaced within 72 months, while -100 and -101 pumps must be replaced within 96 months. If the intent is to control the compliance time at the airplane level, AAL stated that the language throughout paragraph (h) of the proposed AD should be revised to reflect that intent; American provided some example language.

We agree that this AD should specify the compliance times at the airplane level. Therefore, we have revised paragraphs (h)(1) and (h)(2) of this AD by replacing the text in the beginning of the sentences, “For affected fuel pumps that have . . . ,” with the text “For airplanes with fuel pumps that have . . .” in order to clearly identify the airplane configuration.

## **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

#### **Related Service Information under 1 CFR part 51**

Airbus has issued the following service information:

- Airbus Service Bulletin A330-28-3127, Revision 02, dated April 14, 2016.
- Airbus Service Bulletin A340-28-4138, Revision 01, dated September 24, 2015.
- Airbus Service Bulletin A340-28-5060, Revision 01, dated September 24, 2015.

The service information describes procedures to identify and replace affected fuel pumps with serviceable fuel pumps. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Costs of Compliance**

We estimate that this AD affects 99 airplanes of U.S. registry.

We also estimate that it will take about 4 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$33,660, or \$340 per product.

In addition, we estimate that any necessary follow-on actions would take about 17 work-hours and require parts costing \$10,400, for a cost of \$11,845 per product. We have no way of determining the number of airplanes that might need these actions.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2016-20-10 Airbus:** Amendment 39-18676; Docket No. FAA-2016-6418; Directorate Identifier 2015-NM-158-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.



**(c) Applicability**

This AD applies to Airbus Model A330-223F and -243F airplanes; Model A330-201, -202, -203, -223, and -243 airplanes; Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; Model A340-211, -212, and -213 airplanes; Model A340-311, -312, and -313 airplanes; Model A340-541 and A340-642 airplanes; certificated in any category; all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 28, Fuel.

**(e) Reason**

This AD was prompted by reports of fuel leaking through fuel pump electrical connectors and of fuel pump electrical connector damage caused by the build-up of moisture behind the electrical connectors. Electrical connections that become damaged by moisture can create an ignition source and a fuel leak. We are issuing this AD to prevent a potential ignition source and a fuel leak through damaged fuel pump electrical connectors, which creates a flammability risk in an area adjacent to the fuel tank

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Identify Part Numbers (P/Ns)**

Within 48 months after the effective date of this AD, inspect each fuel pump to identify the part number, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-28-3127, Revision 02, dated April 14, 2016; Airbus Service

Bulletin A340-28-4138, Revision 01, dated September 24, 2015; or Airbus Service Bulletin A340-28-5060, Revision 01, dated September 24, 2015; as applicable to airplane model. A review of airplane delivery or maintenance records is acceptable in lieu of this inspection if the part number of the fuel pump can be conclusively determined from that review.

**(h) Modification**

If, during the inspection required by paragraph (g) of this AD, it is determined that any affected fuel pump is installed: Within the compliance time specified in paragraph (h)(1) or (h)(2) of this AD, depending on the configuration of the affected fuel pumps installed, replace each affected fuel pump with a serviceable fuel pump, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-28-3127, Revision 02, dated April 14, 2016; Airbus Service Bulletin A340-28-4138, Revision 01, dated September 24, 2015; or Airbus Service Bulletin A340-28-5060, Revision 01, dated September 24, 2015; as applicable to airplane model.

(1) For airplanes with fuel pumps that have a part number or combination of part numbers that are specified in paragraphs (h)(1)(i) through (h)(1)(vi) of this AD: Do the replacement within 72 months after the effective date of this AD.

(i) All installed fuel pumps have P/N 568-1-28300-001.

(ii) All installed fuel pumps have P/N 568-1-28300-002.

(iii) Installed fuel pumps have a combination of P/Ns 568-1-28300-001 and 568-1-28300-002.

(iv) Installed fuel pumps have a combination of P/Ns 568-1-28300-001 and 568-1-28300-101.

(v) Installed fuel pumps have a combination of P/Ns 568-1-28300-002 and 568-1-28300-101.

(vi) Installed fuel pumps have a combination of P/Ns 568-1-28300-001, 568-1-28300-002, and 568-1-28300-101.

(2) For airplanes with fuel pumps that have a part number or combination of part numbers that are specified in paragraphs (h)(2)(i) through (h)(2)(iii) of this AD: Do the replacement within 96 months after the effective date of this AD.

(i) All installed fuel pumps have P/N 568-1-28300-100.

(ii) All installed fuel pumps have P/N 568-1-28300-101.

(iii) Installed fuel pumps have a combination of P/Ns 568-1-28300-100 and 568-1-28300-101.

**(i) Definitions**

(1) For the purpose of this AD, an “affected fuel pump” is defined as any pump having P/N 568-1-28300-001, 568-1-28300-002, 568-1-28300-100, or 568-1-28300-101.

(2) For the purpose of this AD, a “serviceable fuel pump” is a pump having a part number not listed in paragraph (i)(1) of this AD.

**(j) No Reporting Requirement**

Although Airbus Service Bulletin A330-28-3127, Revision 02, dated April 14, 2016; Airbus Service Bulletin A340-28-4138, Revision 01, dated September 24, 2015; and Airbus Service Bulletin A340-28-5060, Revision 01, dated

September 24, 2015; specify submitting certain information to the manufacturer, and specifies that action as “RC” (Required for Compliance), this AD does not include that requirement.

**(k) Parts Installation Prohibition**

After the identification of the fuel pump part numbers required by paragraph (g) of this AD, comply with the prohibition required by paragraph (k)(1) or (k)(2) of this AD, as applicable.

(1) For an airplane that does not have an affected fuel pump installed: After the identification of the fuel pump part numbers required by paragraph (g) of this AD, no person may install an affected fuel pump on the airplane.

(2) For an airplane that has an affected fuel pump installed: After modification of the airplane as required by paragraph (h) of this AD, no person may install an affected fuel pump on the airplane.

**(l) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using the applicable service information specified in paragraphs (l)(1), (l)(2), (l)(3), and (l)(4) of this AD. This service information is not incorporated by reference in this AD.

(1) Airbus Service Bulletin A330-28-3127, dated July 14, 2015.

(2) Airbus Service Bulletin A330-28-3127, Revision 01, dated September 24, 2015.

(3) Airbus Service Bulletin A340-28-4138, dated July 14, 2015.

(4) Airbus Service Bulletin A340-28-5060, dated July 14, 2015.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1138; fax: 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(3) Required for Compliance (RC):** Except as provide by paragraph (j) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(n) Related Information**

(1) Refer to Continuing Airworthiness Information (MCAI) EASA AD 2015-0194, dated September 22, 2015, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6418.

**(o) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Service Bulletin A330-28-3127, Revision 02, dated April 14, 2016.

(ii) Airbus Service Bulletin A340-28-4138, Revision 01, dated  
September 24, 2015.

(iii) Airbus Service Bulletin A340-28-5060, Revision 01, dated  
September 24, 2015.

(3) For service information identified in this AD, contact Airbus SAS,  
Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,  
France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 45 80; email:  
airworthiness.A330-A340@airbus.com; Internet: <http://www.airbus.com>. You may view  
this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue  
SW., Renton, WA. For information on the availability of this material at the FAA, call  
425-227-1221.

(4) You may view this service information at the FAA, Transport Airplane  
Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of  
this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 26, 2016.

Dionne Palermo,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2016-23647 Filed: 10/17/2016 8:45 am; Publication Date: 10/18/2016]